## **CLAIMS**

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- 1. A method for adapting a transmission parameter in a transmitting node (1) of a data communication system (8) to the current link quality of a data communication channel (7), the adapted transmission parameter being selected by the transmitting node (1) from a set of transmission parameters in dependence on a number of successful transmissions (s), the number of successful transmissions (s) being compared in the transmitting node (1) against one of a first value (s1) corresponding to a first state (H) of the transmitting node (1) and a second value (s2) corresponding to a second state (L) of the transmitting node (1), the method comprising in the transmitting node (1) the steps of:
- counting the number of successful transmissions (s);

selecting the adapted transmission parameter

in response to the number of successful transmissions (s) equaling or exceeding the first value (s1) when the transmitting node (1) is in the first state (H), and

in response to the number of successful transmissions (s) equaling or exceeding the second value (s2) when the transmitting node (1) is in the second state (L); and

in dependence of the result of a following transmission, operating the transmitting node (1) in one of the first state (H) and the second state (L).

- 2. Method according to claim 1, wherein the step of operating the transmitting node (1) in the second state (L) further comprises in the event of a faulty transmission transitioning to the first state (H).
- 3. Method according to any preceding claim further comprising setting the first value (s1) to 3 and the second value (s2) to 10.

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- 4. Method according to any preceding claim further comprising counting a number of faulty transmissions (f) and selecting the adapted transmission parameter in dependence of a threshold of the number of faulty transmissions (f<sub>T</sub>).
- Method according to claim 4 further comprising setting the threshold of the number of faulty
  transmissions (f<sub>T</sub>) to 1.
  - 6. Method according to any preceding claim further comprising selecting the transmission parameter used by a responding receiver (2).
  - 7. Method according to any preceding claim, wherein the step of selecting the adapted transmission parameter further comprises selecting a different data rate.
- 8. Method according to any preceding claim, wherein the step of selecting the adapted transmission parameter further comprises selecting a packet length different to the length used before.
  - 9. A computer program comprising program code means for performing the method of any of the claims 1 to 8 when said program is run on a computer.
- 10. A computer program product stored on a computer usable medium, comprising computer readable program means for causing a computer to perform the method of any of the preceding claims 1 to 8.
  - 11. An apparatus (1) for adapting a transmission parameter to the current link quality of a data communication channel (7), the adapted transmission parameter being selected from a set of transmission parameters in dependence on a number of successful transmissions (s), the

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number of successful transmissions (s) being compared against one of a first value (s1) corresponding to a first state (H) of the apparatus and a second value (s2) corresponding to a second state (L) of the apparatus, the apparatus comprising:

a success counter (10) for counting the number of successful transmissions (s);

a selecting unit (12) for selecting the adapted transmission parameter

in response to the number of successful transmissions (s) equaling or exceeding the first value (s1) when the apparatus is in the first state (H), and

in response to the number of successful transmissions (s) equaling or exceeding the second value (s2) when the apparatus is in the second state (L); and

- a decision unit (14) which in dependence of the result of a following transmission informs the selecting unit (12) to operate in one of the first state (H) and the second state (L).
- 12. Apparatus according to claim 11 further comprising a failure counter for counting a number of faulty transmissions (f).

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